



50 Hz MF fields exposure of the French population

- ◆ The question of ELF MF on health is mainly the question of the children leukaemia risk
- ◆ Most of the epidemiological studies consider that people living near transmission network are exposed and that people living far away from transmission network are not
- ◆ The risk increases when mean exposure is > 0.3 or $0.4 \mu\text{T}$ (personal exposure)
- ◆ The objectives of this study are to know
 - What is the French population mean exposure to 50 Hz magnetic fields?
 - Who are the persons the most exposed?
 - Why are they exposed?



- ◆ The study was called by the French Health Ministry
- ◆ It is carried out by Supélec
- ◆ With the contribution
 - of EDF Medical Study Department
 - of EDF Research and Development Department
 - of a Poll Institute
 - of RTE (French transmission network company)
- ◆ It is the subject of a third cycle scientific thesis (main topic : statistics)
- ◆ The study is called EXPERS study



Design of the Study

- ◆ A personal exposure study
 - On a sample of 1000 adults + 1000 children
 - Randomly recruited in the whole country
- ◆ MF measurement are registered during 24 hours
 - EMDEX II
 - 1 measurement every 3 seconds
- ◆ Questionnaire about way of life and home characteristics
- ◆ Analyses
 - Quantitative: mean, pick, RCMS, ...
 - Qualitative: association with SES, environmental factors, domestic factors, ...